

# KEY

Chemistry 112

Quiz Metric/Lab Safety Ver4 /18

Name: \_\_\_\_\_

1. Write the word TRUE or FALSE for the following statements:

/10

1. T	True	1. The last thing you should do before you leave the lab is wash your hands.
2. F	False	2. If a chemical gets on your skin or clothing, rinse it, then <u>inform your teacher</u> .
3. T	True	3. The proper technique for smelling a substance is to gently sniff while moving your hand above the container. This known as wafting the substance.
4. T or F	True or False	4. If you cut yourself, wash the area under cold water and inform your teacher.
5. F	False	5. Flip-flops may be worn in the laboratory.
6. T	True	6. Read the directions for the procedure before beginning an experiment.
7. T	True	7. The MSDS sheets are located in a red binder on the locker in the laboratory.
8. T	True	8. Safety glasses are to be worn at all times in the lab.
9. F	False	9. If you spill a chemical, wipe it up, then inform the teacher.
10. F	False	10. Only taste substances that you have been instructed to taste in the laboratory.

2. Do the following metric conversions. BE SURE TO SHOW WORK for questions that are worth more than one point.

a. 48 nL = _____ L	$48 \text{ nL} \times \frac{1 \text{ L}}{10^9 \text{ nL}} = 4.8 \times 10^{-8}$	/1
b. 11.2 cm = _____ mm	$11.2 \text{ cm} \times \frac{1 \text{ m}}{10^2 \text{ cm}} \times \frac{10^3 \text{ mm}}{1 \text{ m}} = 11.2 \times 10 = 1.12 \times 10^2 \text{ mm}$	/2
c. $5.4 \times 10^{-42} \text{ dmol} = \text{_____ kmol}$	$5.4 \times 10^{-42} \text{ dmol} \times \frac{1 \text{ mol}}{10^1 \text{ dmol}} \times \frac{1 \text{ kmol}}{10^3 \text{ mol}} = 5.4 \times 10^{-46} \text{ kmol}$	/2
d. $6.8 \times 10^{28} \text{ g} = \text{_____ } \mu\text{g}$	$6.8 \times 10^{28} \text{ g} \times \frac{10^6 \mu\text{g}}{1 \text{ g}} = 6.8 \times 10^{34} \mu\text{g}$	/1
e. 385 Mm = _____ nm	$3.85 \times 10^2 \text{ Mm} \times \frac{10^6 \text{ m}}{1 \text{ Mm}} \times \frac{10^9 \text{ nm}}{1 \text{ m}} = 3.85 \times 10^{17} \text{ nm}$	/2